

IN THE CLAIMS:

1. (Original): A ceramic catalyst carrier with a honeycomb structure comprising:
a plurality of cell passages integrally formed with the ceramic catalyst carrier by extrusion, said cell passages having a cross-sectional shape of circle;
a plurality of partition walls each separating a cell; and
a catalyst coated on the inner surface of the cell passages,
wherein the cells comprising said cell passage and said catalyst are integrally formed with the catalyst carrier.
2. (Original): The ceramic catalyst carrier of claim 1, wherein the cells are separated by equal spaces in a row and wherein each said row is positioned with displacement of one radius of said cell to other rows which are adjacent thereto.
3. (Currently Amended): The ceramic catalyst carrier of claim 1, wherein the cells form ~~the~~ honeycomb structure, wherein ~~the~~ cells are separated by equal spaces in a row and wherein each said row is positioned with vertical displacement of about $(a+t)\sin 60^\circ$, wherein "a" is the interior diameter of the cell, and "t" is the minimum thickness of the partition wall.
4. (Original): The ceramic catalyst carrier of claim 3 wherein the thinnest portion of the partition wall has a thickness of not more than 165 μm .
5. (Original): The ceramic catalyst carrier of claim 1 having a cell density of more than 400 cpsi, wherein the thinnest portion of the partition wall has a thickness of not more than 165 μm .
6. (Currently Amended): A ceramic catalyst carrier comprising:
a plurality of cell passages arranged in a honeycomb structure, said cell passages having an opening with a substantially circular cross-section;
walls separating the cell passages, wherein said walls are formed from extruded ceramic in an extrusion process; and
a catalyst coating covering the interior cell walls of the cell passage and formed during the extrusion process.
7. (Withdrawn): A method for forming a ceramic catalyst carrier comprising:
extruding a ceramic material and catalyst layer material in a honeycomb structure, wherein the honeycomb structure comprises cell passages and the passages have a substantially circular cross-section.